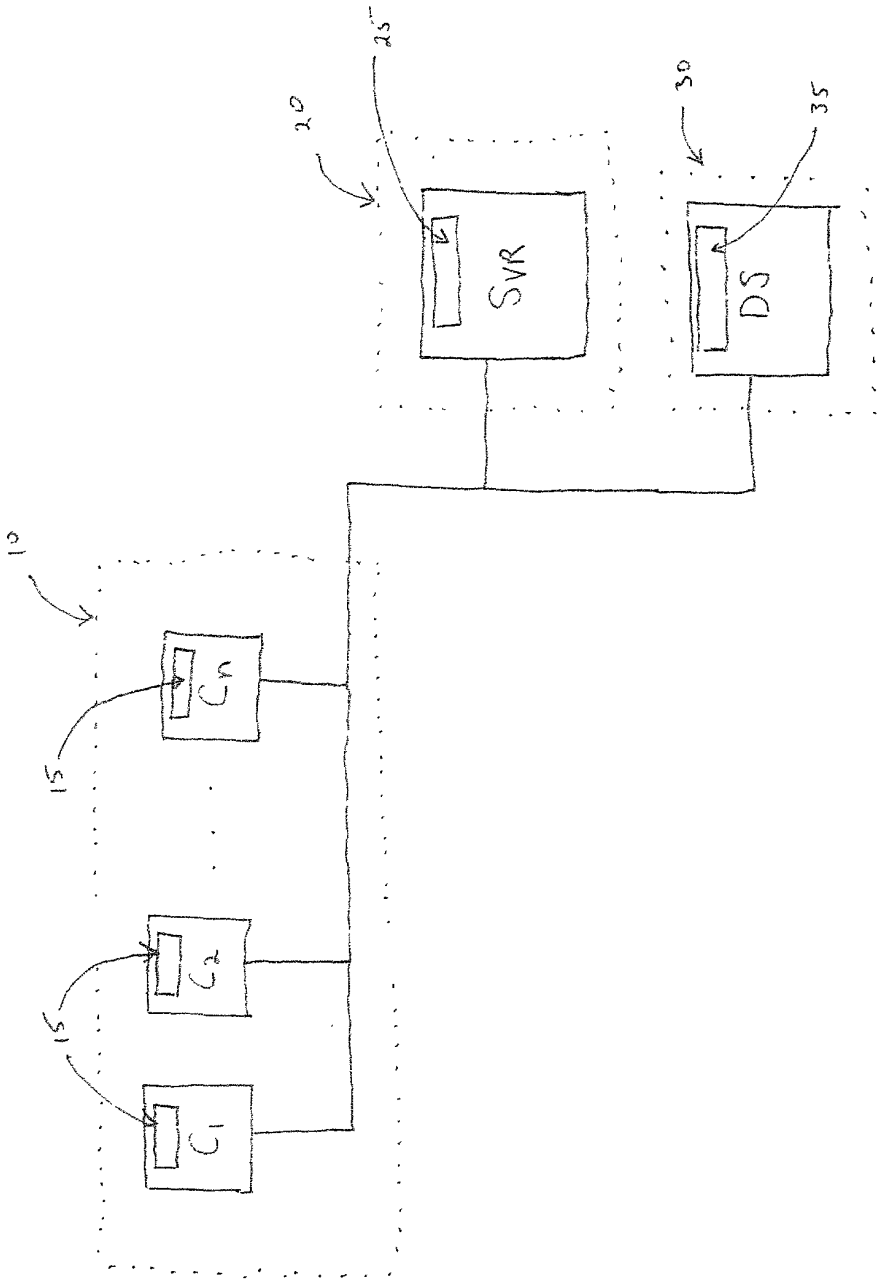

FIG. 1

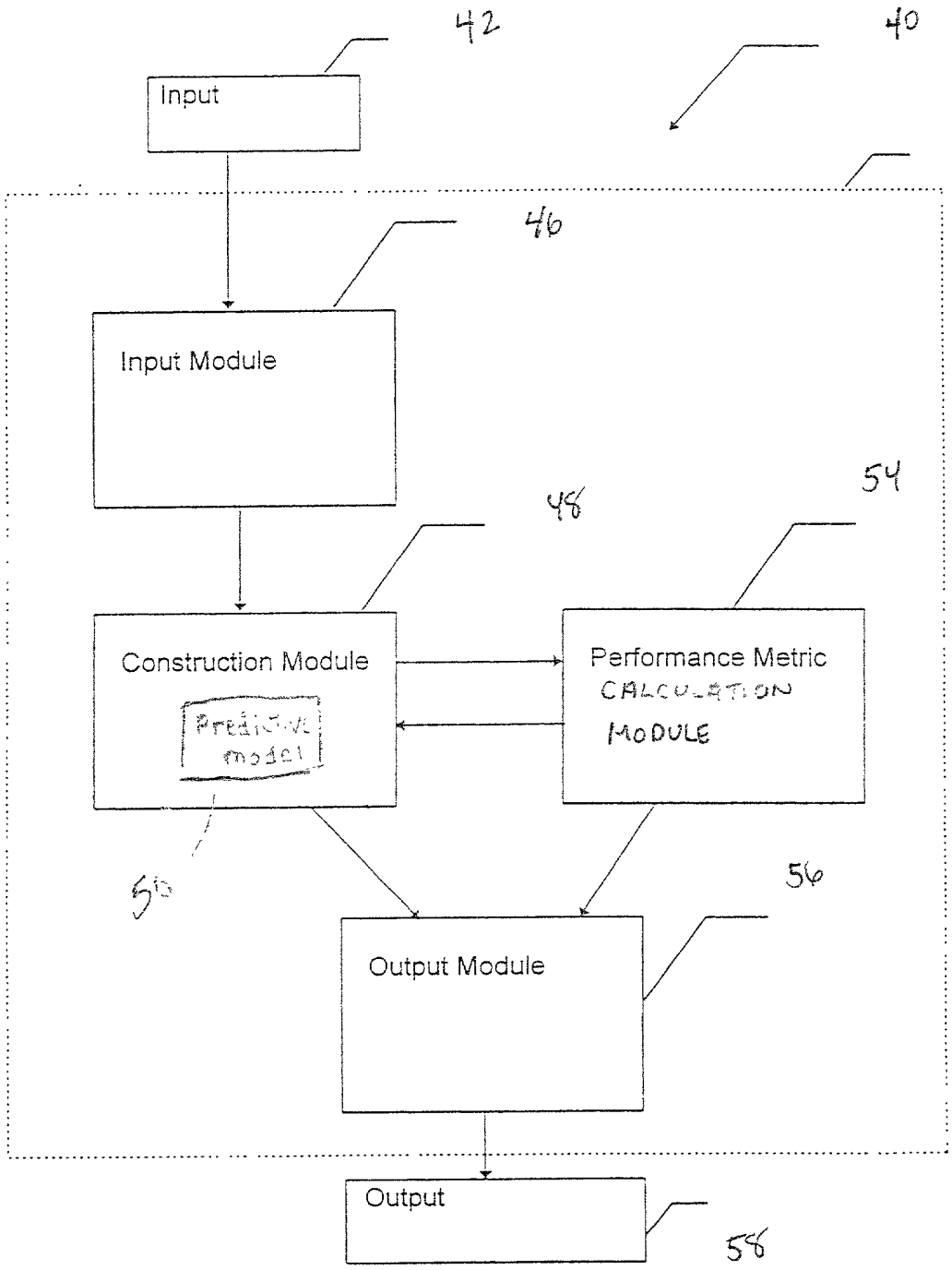
42
40
Input
46
Input Module
48
54
Construction Module
Predictive model
Performance Metric
CALCULATION
MODULE
50
56
Output Module
Output
58

FIG. 2

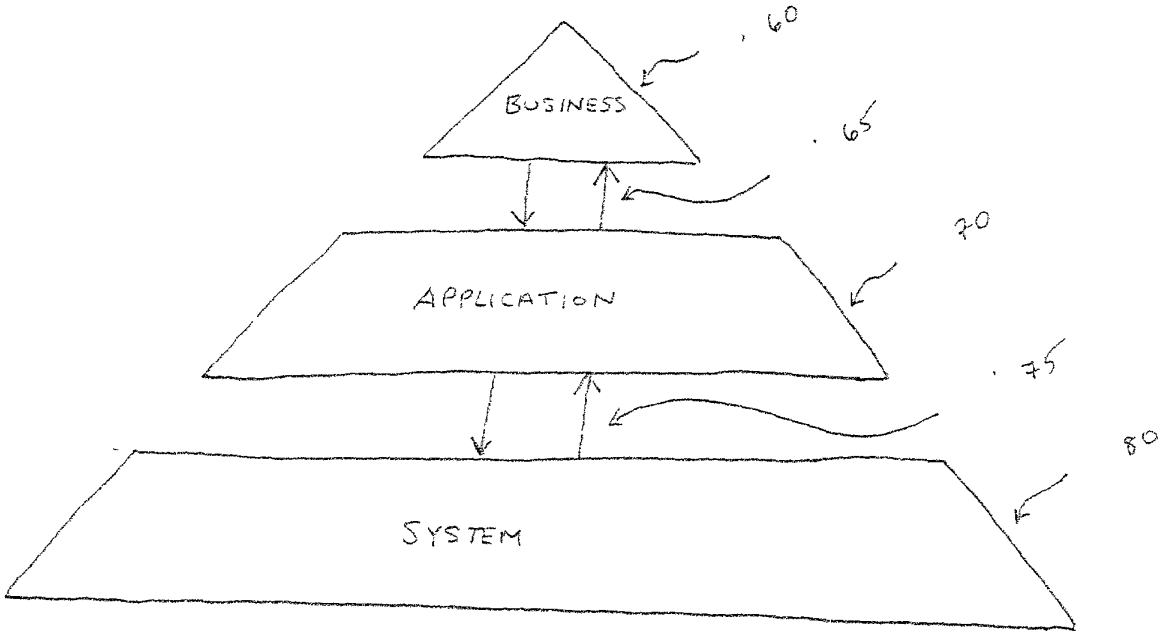

FIG. 3

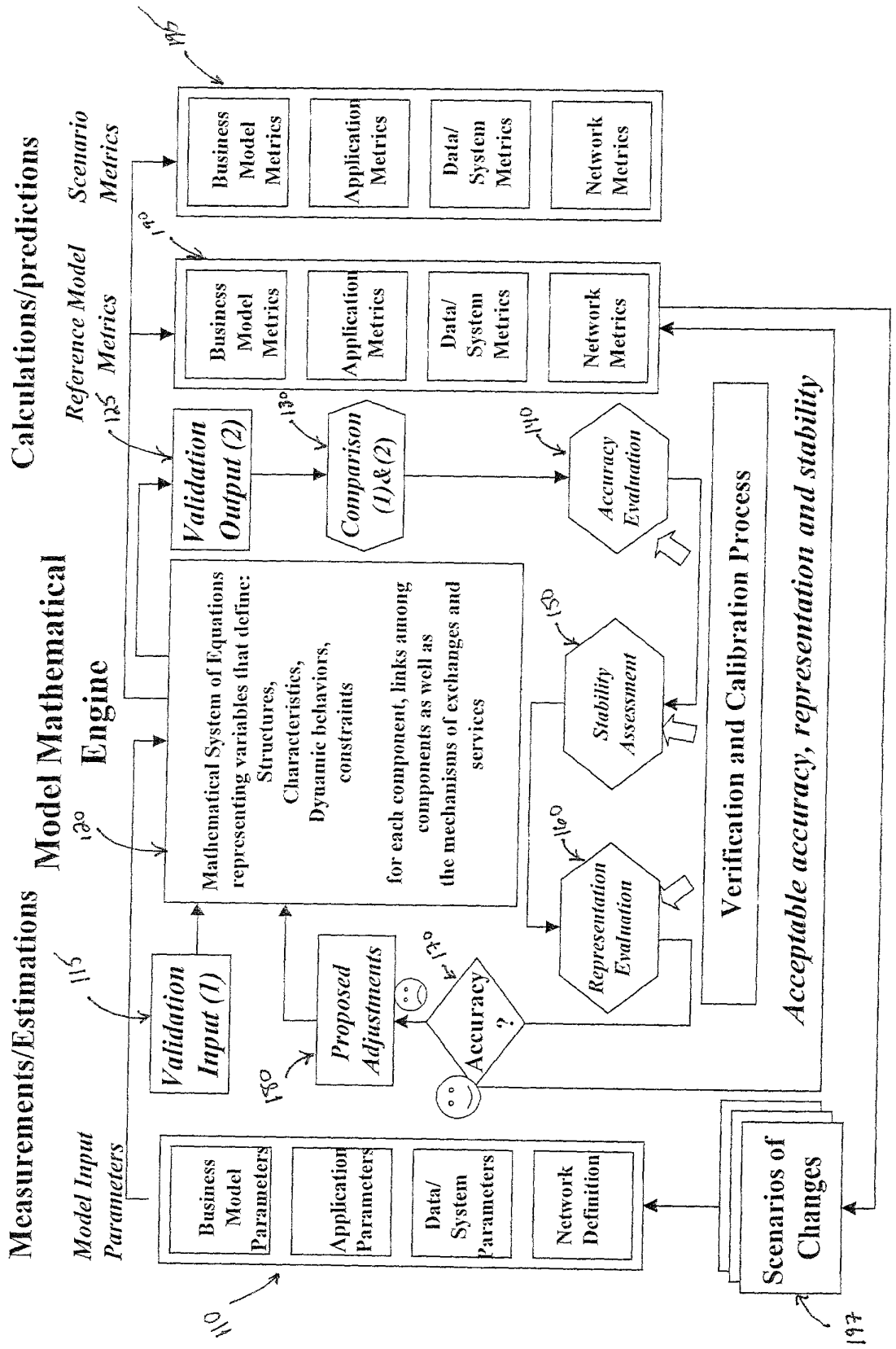
Measurements/Estimations
Model Mathematical Engine
Calculations/predictions
Model Input Parameters
Reference Model Metrics
Scenario Metrics
Validation Input (1)
Mathematical System of Equations representing variables that define: Structures, Characteristics, Dynamic behaviors, constraints for each component, links among components as well as the mechanisms of exchanges and services
Validation Output (2)
Comparison (1)&(2)
Accuracy Evaluation
Business Model Parameters
Application Parameters
Data/ System Parameters
Network Definition
Proposed Adjustments
Accuracy ?
Representation Evaluation
Stability Assessment
Verification and Calibration Process
Acceptable accuracy, representation and stability
Scenarios of Changes
Business Model Metrics
Application Metrics
Data/ System Metrics
Network Metrics
110
115
120
125
130
135
140
145
150
155
160
165
170
175
180
185
190
195
197

FIG. 4

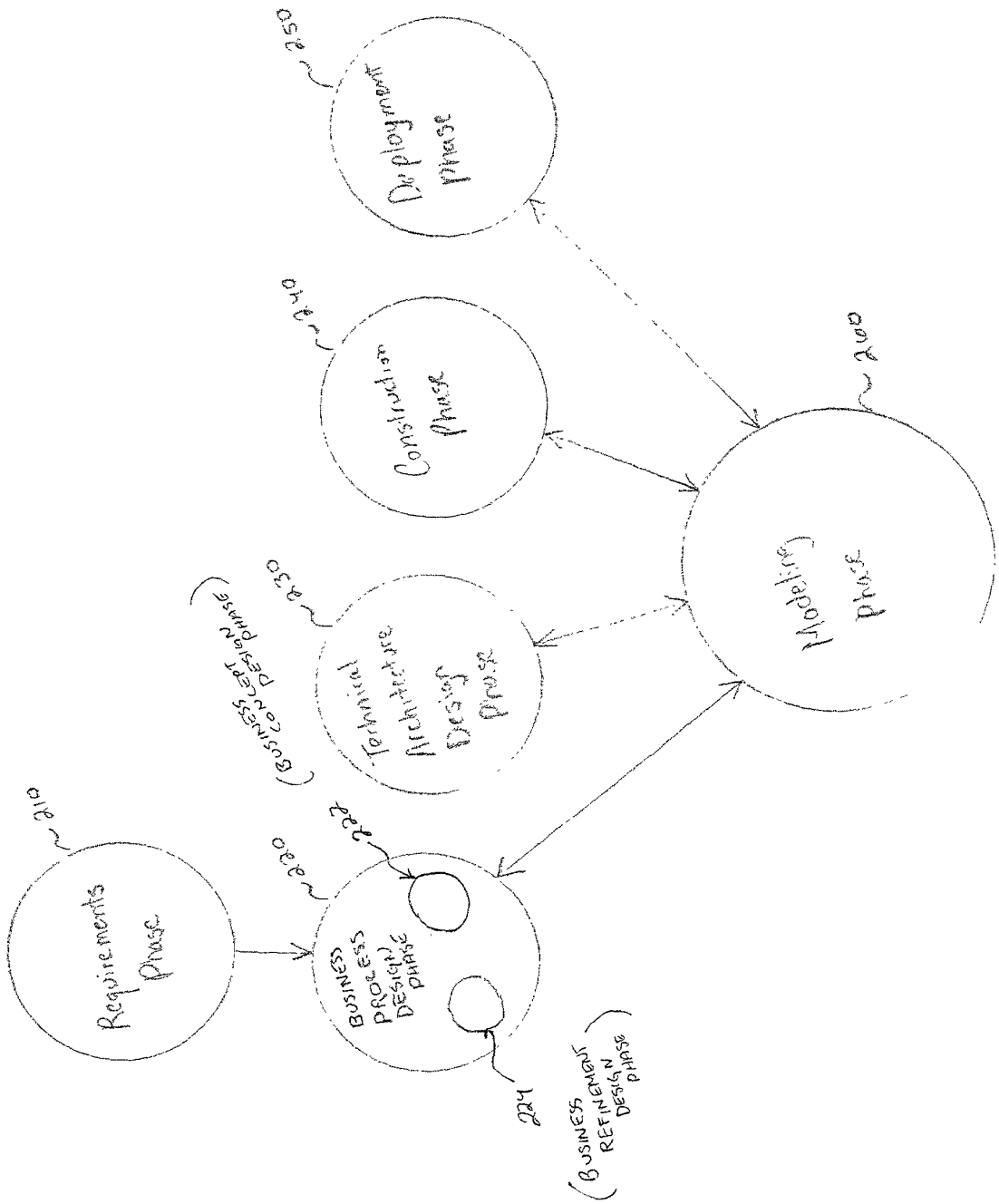
Requirements Phase
310
Modeling phase
210
Deployment Phase
350
Construction Phase
340
Technical Architecture Design Phase
330
(BUSINESS CASE DESIGN PHASE)
BUSINESS PROCESS DESIGN) PHASE
320
224
(BUSINESS REFINEMENT DESIGN PHASE)

FIG 5

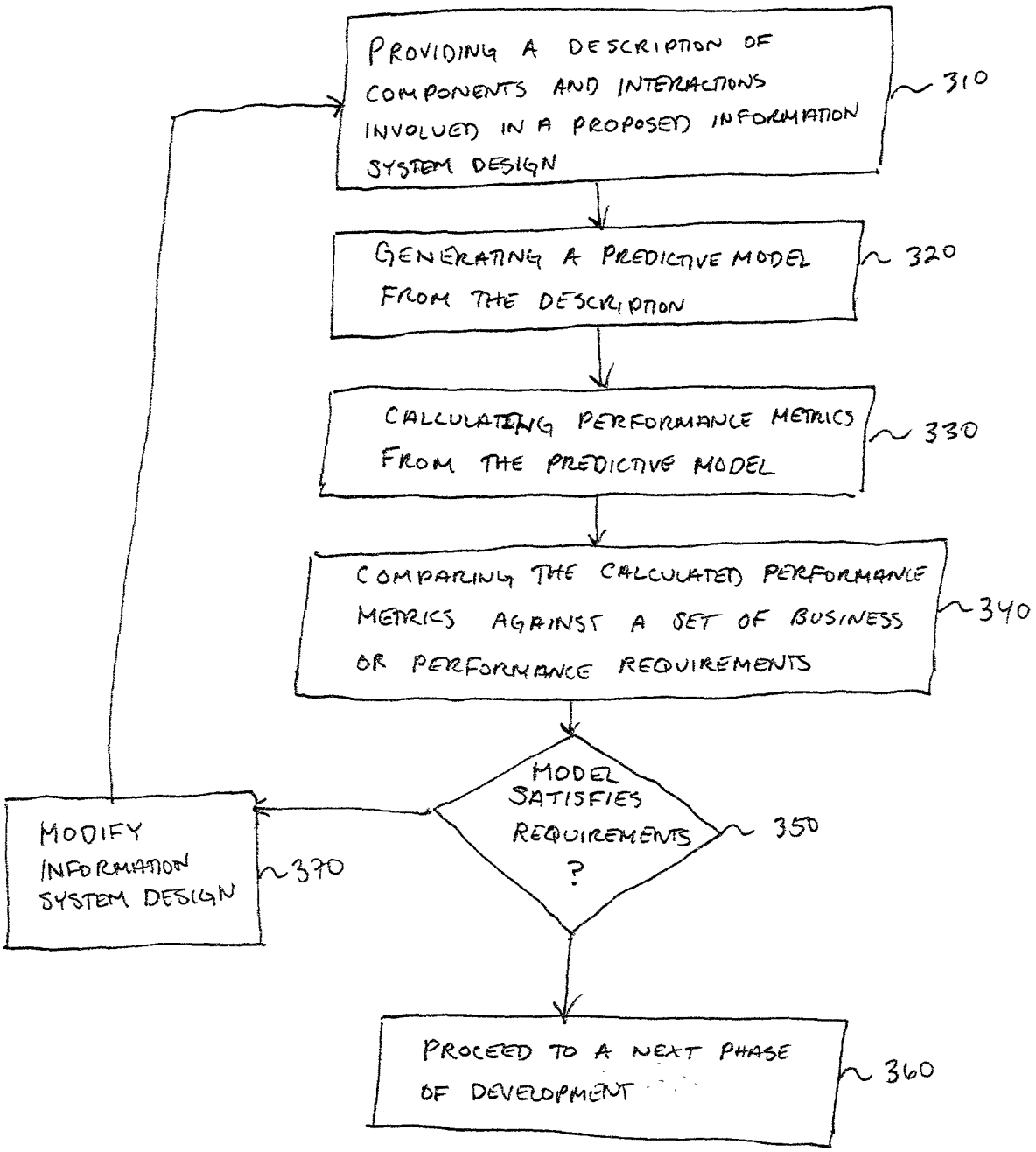
PROVIDING A DESCRIPTION OF COMPONENTS AND INTERACTIONS INVOLVED IN A PROPOSED INFORMATION SYSTEM DESIGN
310
GENERATING A PREDICTIVE MODEL FROM THE DESCRIPTION
320
CALCULATING PERFORMANCE METRICS FROM THE PREDICTIVE MODEL
330
COMPARING THE CALCULATED PERFORMANCE METRICS AGAINST A SET OF BUSINESS OR PERFORMANCE REQUIREMENTS
340
MODEL SATISFIES REQUIREMENTS ?
350
MODIFY INFORMATION SYSTEM DESIGN
370
PROCEED TO A NEXT PHASE OF DEVELOPMENT
360

FIG. 6

Page 4 of 5

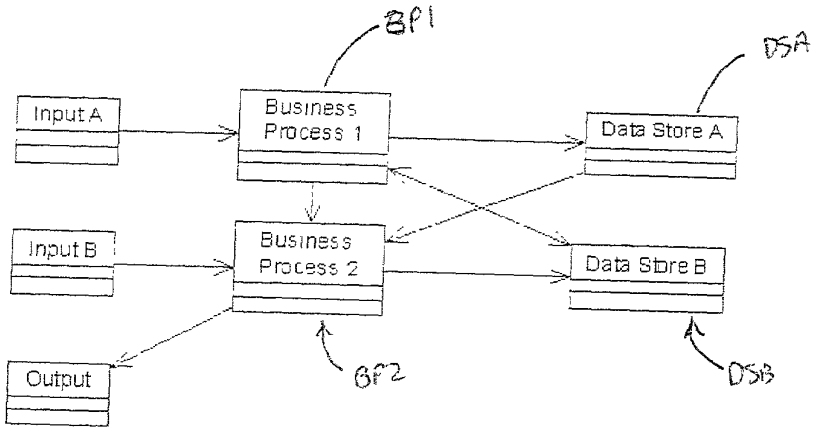

FIG. 7

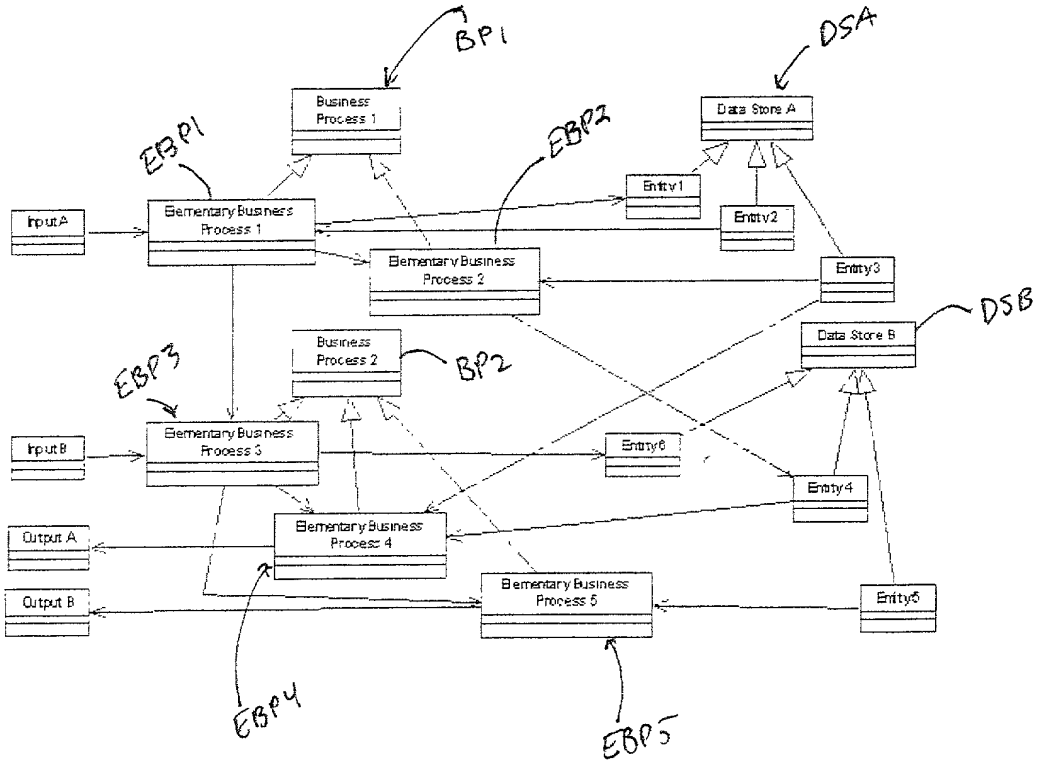
BP1
DSA
Business Process 1
Data Store A
EBP1
EBP2
Entity1
Input A
Elementary Business Process 1
Entity2
Elementary Business Process 2
Entity3
DSB
Data Store B
Business Process 2
BP2
EBP3
Input B
Elementary Business Process 3
Entity6
Entity4
Output A
Elementary Business Process 4
Output B
Elementary Business Process 5
Entity5
EBP4
EBP5

FIG. 8

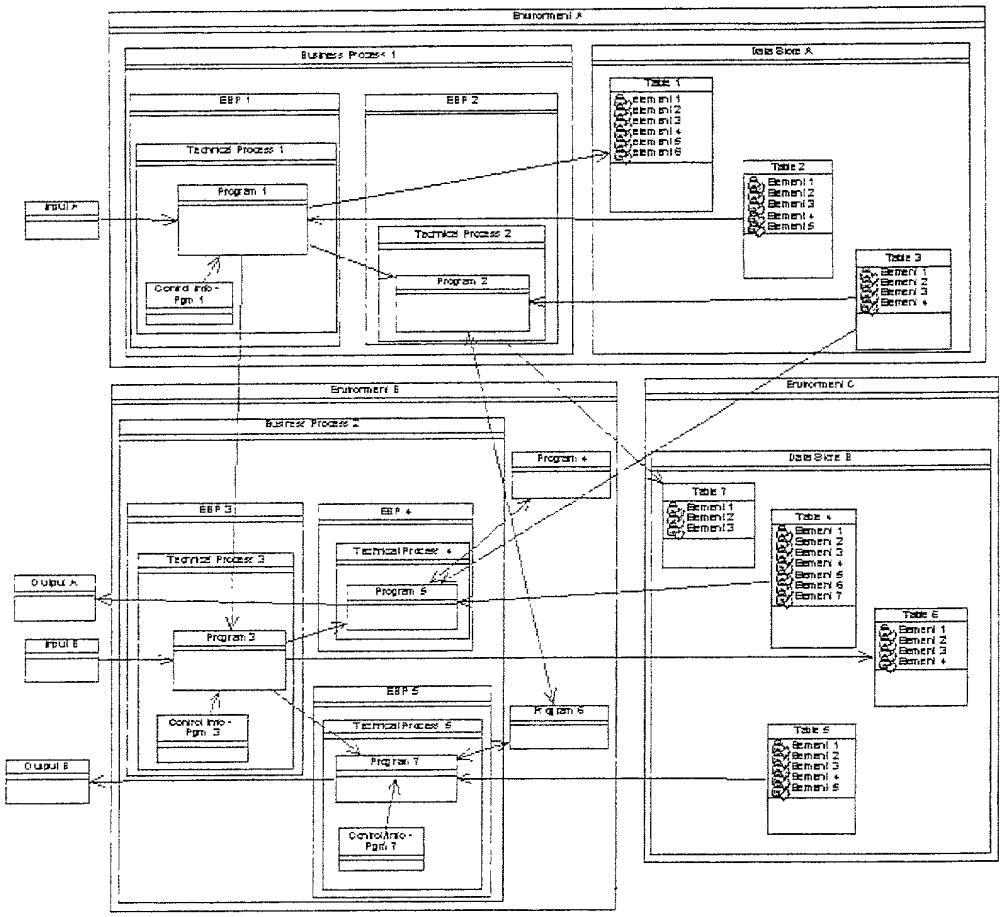

FIG. 9

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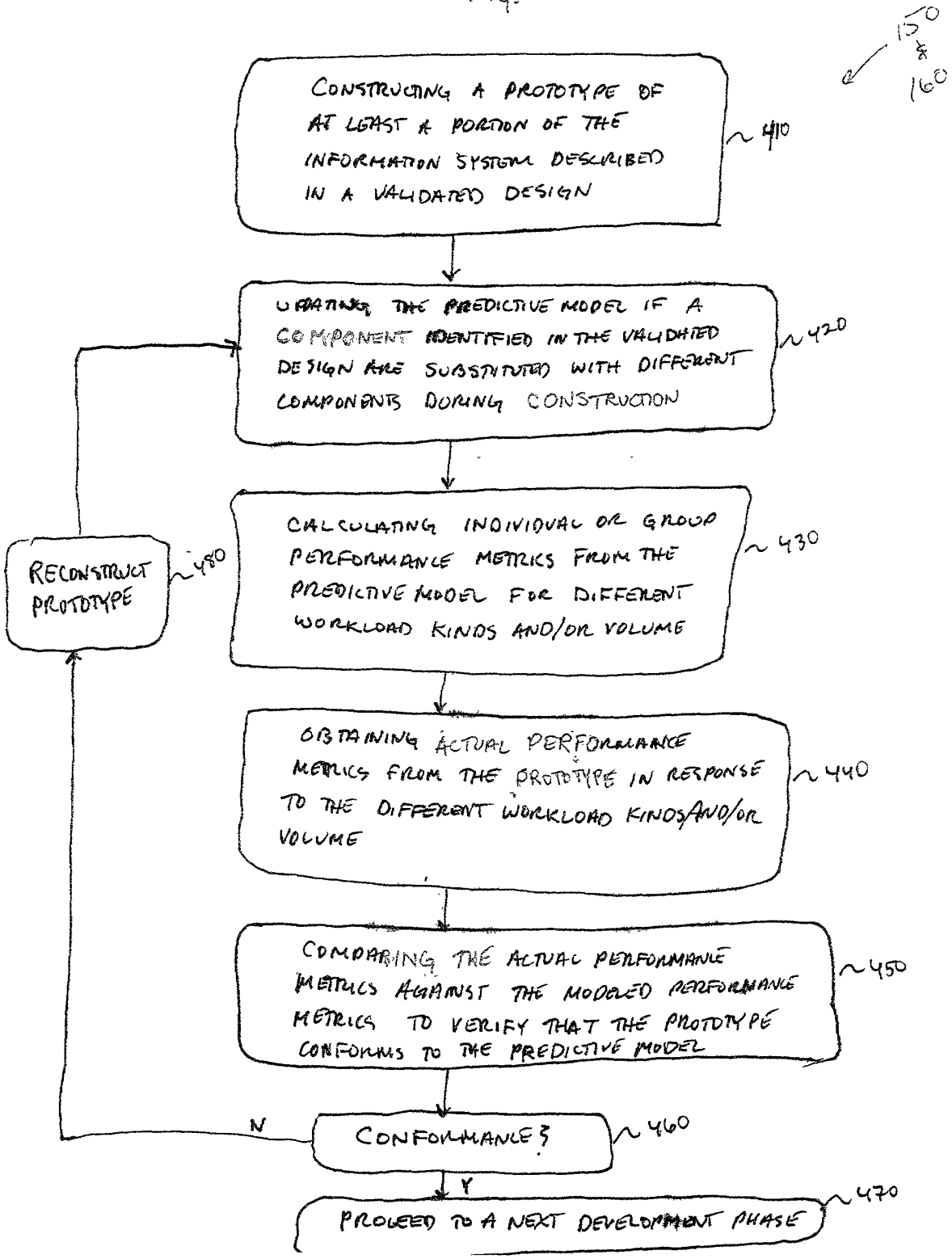
FIG. 10



Attorney Docket No. 3023.1001-003

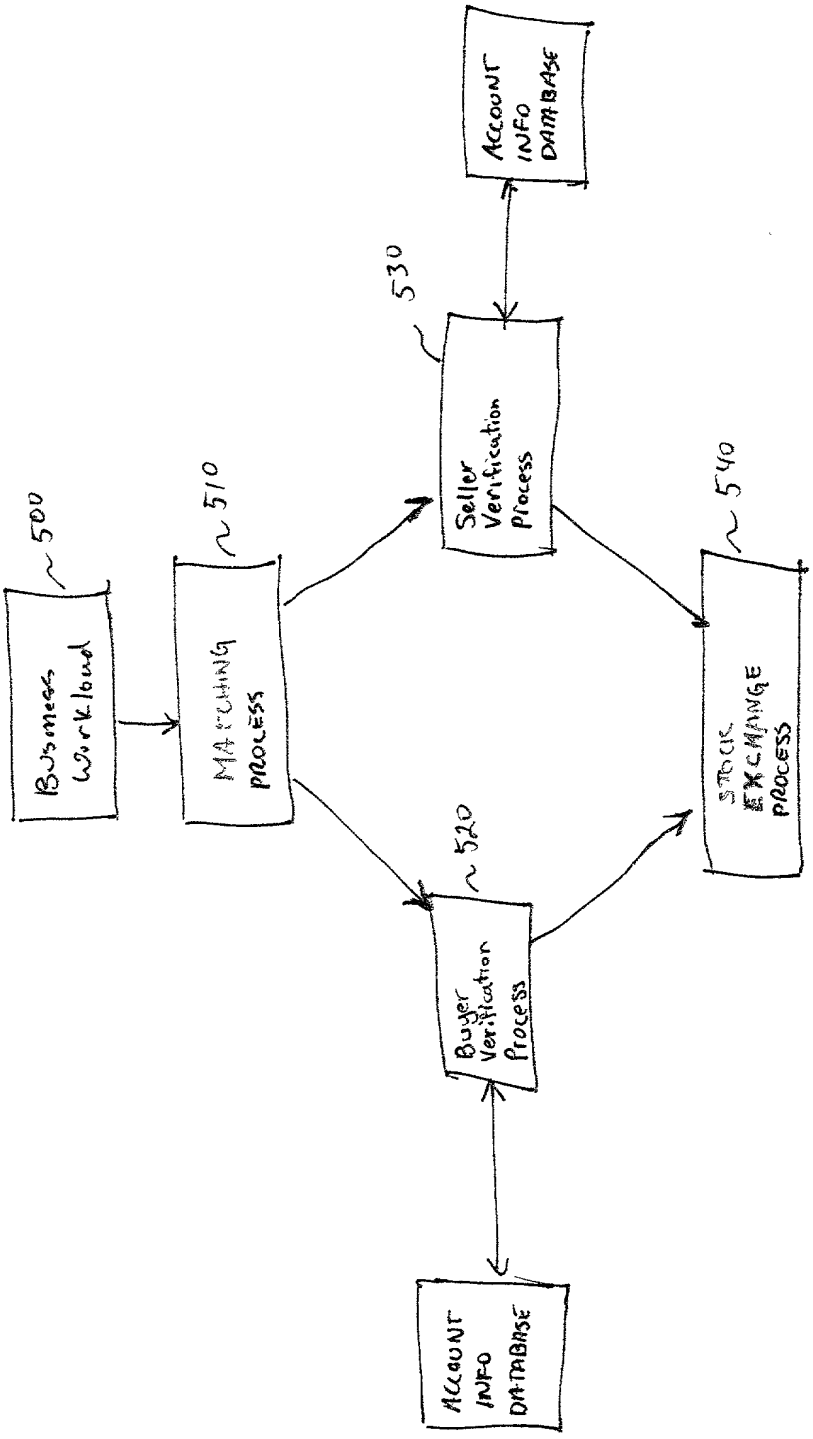


FIG. 11
PRIOR ART

EFS-Web Version

Fig. 12

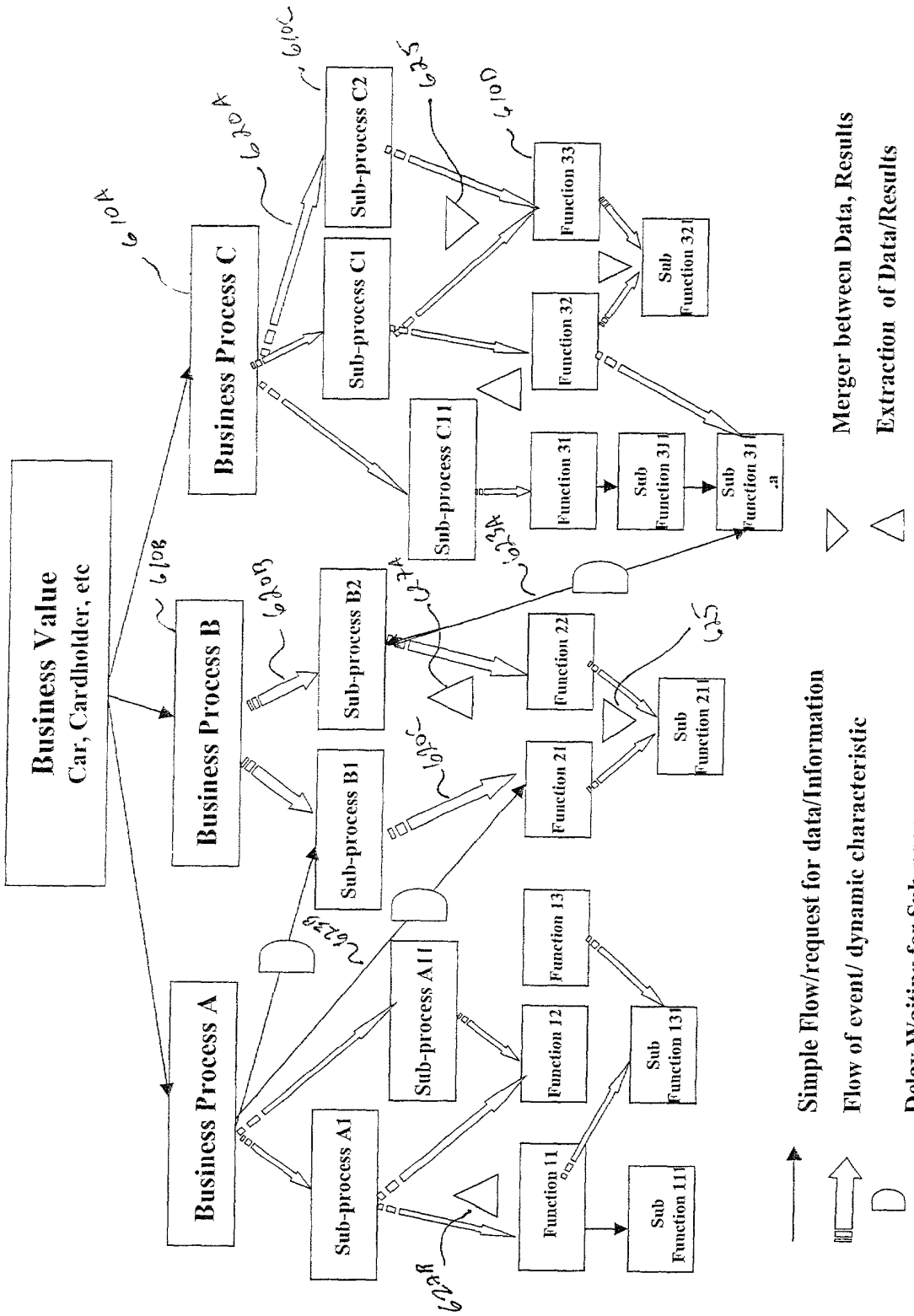
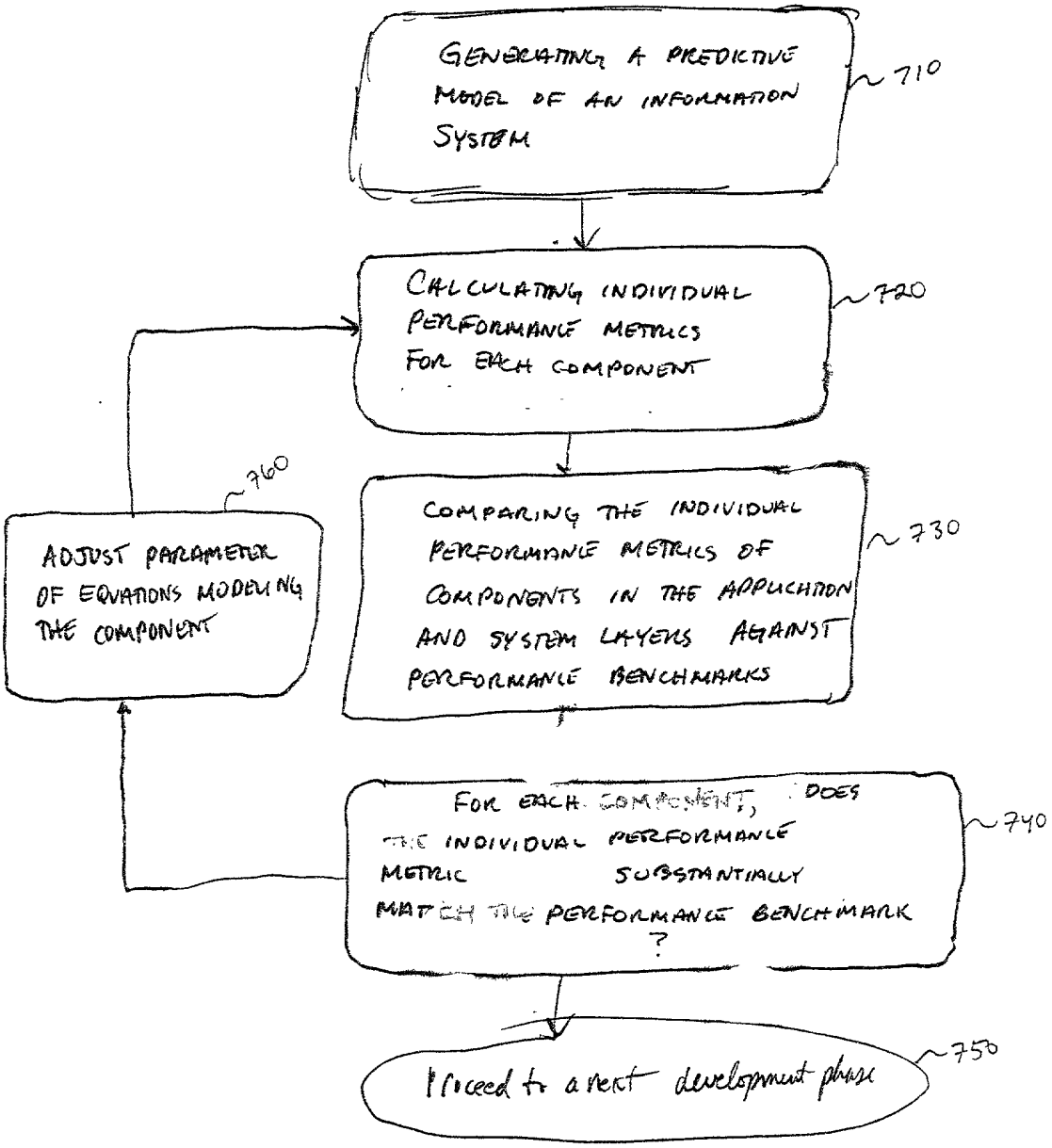


FIG. 13



Attorney Docket No. 3023.1001-003